

After 2 p. m. of the 19th the typhoon moved WNW., or W. by N., and it is very probable that it filled up on the 21st near the northern part of Hainan or the southern China coast north of Hainan.

The typhoon of the Ladrone Islands and the Bonins.—This typhoon seems to have formed on the 13th to 14th over the Ladrone Islands, about 250 miles north of Guam, where a gale from the southwest quadrant was observed for a good number of hours on the 15th and 16th. The typhoon moved slowly NW. on the 14th to 17th and recurved gradually to NE. on the 18th and 19th southwest and west of the Bonins. A gale from the S. was reported on the 20th by the station of Chichijima. The typhoon was situated at noon of the 21st in about 144° longitude E. and near 35° latitude N., moving north-eastward.

The typhoon of Formosa and China.—The last typhoon of the month appeared on the 25th over the Pacific about 300 miles to the east of San Bernardino Strait. The first part of the track before the 25th is not certain, but probably it formed north of Yap and west of Guam on

the 24th near 139° longitude E. and 13° latitude N., and moved westward until the 25th or 26th, when it inclined northwestward. The typhoon was situated at 6 a. m. of the 27th near 125° longitude E. and 16° latitude N., moving NW. by N. At 6 a. m. of the 28th, the center was near or over the Batanes Islands, and in the afternoon of the same day it traversed Formosa, moving still NW. by N. On the 29th, in the early morning, the typhoon entered China not far from 119° longitude E. and 26° latitude N.

Besides the typhoon just mentioned, a low-pressure area traversed Luzon, to the south of Manila, moving westward on the 23d. Once in the China Sea it developed into a depression or typhoon which moved probably WNW., and finally filled up in about 111° longitude E. and 16° latitude N.

Before finishing this article we may add that the last typhoon of August, after passing to the west of Shanghai, recurved NE. toward Korea and the Sea of Japan. It was felt severely in Korea during the night of September 3 to 4.

NOTES ON WEATHER IN OTHER PARTS OF THE WORLD.

British Isles.—During the month roughly half the area of the British Isles received a rainfall below the average. * * * The deficiencies were nowhere very large, amounting to more than 40 per cent only in the Western Highlands. * * * The rainfall over the British Isles was rather more uniform than is usual at the season.

The general rainfall expressed as a percentage of the overage was: England and Wales, 123; Scotland, 87; Ireland, 117; British Isles, 110.

In London, Camden Square, the mean temperature for September was 55.5° F., or 2.2° F. below the average.¹

Switzerland.—ROME, September 14.—Reports from the Alps say that snow is falling heavily. At some places it has reached a foot in depth, especially around Mont Blanc, Simplon, and St. Gothard. In the Tyrol the temperature has fallen to winter levels in contrast to the excessive heat of a few weeks ago.—*New York Herald, September 15, 1922.*

China.—A typhoon broke over Chefoo (Shantung) on the 2d and lasted for 36 hours, but the damage done was not very extensive.¹

Philippine Islands.—MANILA, September 19.—Serious damage is believed to have resulted from a typhoon which has swept over the Philippines for the last 36 hours.—*New York Herald, September 19, 1922.*

Australia.—Excellent rains were recorded throughout South Australia during the month and there was every prospect of a really good harvest. The other States also had good harvests.¹

Brazil.—* * * The distribution of rain in the north and central regions was very irregular, some parts having a fall exceeding the normal and others a deficit. In the southern area the rainfall averages 39 mm. below normal. Small high-pressure areas with very active wind circulations prevailed throughout the month and temperatures were generally high. The state of the crops was satisfactory on the whole.¹

¹ *Meteorological Magazine*, October, 1922.

DETAILS OF THE WEATHER IN THE UNITED STATES.

GENERAL CONDITIONS.

A warm, dry month in practically all parts of the country. Drought was most severe south of the 40th parallel; in Kansas, North Dakota, and parts of the upper Lake region, the upper Ohio Valley, and in the District of Columbia, however, rainfall was above normal. (See inset on Chart IV.)

The dry weather was rather definitely related to the pressure distribution and the latter naturally was conditioned by the movement in latitude of cyclones and anticyclones, particularly the slow southeastward drift of the latter across the Lake region, New England, and the Middle Atlantic States, as shown by Charts I and II.

CYCLONES AND ANTICYCLONES.

By W. P. DAY.

No really important storms were charted within the area of the United States proper; however, there were three storms of tropical or near tropical origin in the western Atlantic Ocean adjacent to our coast. The two storms, marked "III" and "V" on the chart were the small typical vortices of young tropical cyclones or hurricanes. The third (No. VI), larger and more far-reaching in its effects, developed on the south side of a strong anticyclone, the consequent constriction of the isobars between the two centers of action causing winds